

EPAUnited States Environmental Protection Agency
Washington, DC 20460**Work Assignment**

Work Assignment Number

1-34

☐ Other ☐ Amendment Number:

Contract Number

EP-W-10-002

Contract Period 11/19/2009 To 11/18/2014

Base

Option Period Number 1

Title of Work Assignment/SF Site Name

Effectiveness VADEQ RBIS

Contractor

INDUSTRIAL ECONOMICS, INCORPORATED

Specify Section and paragraph of Contract SOW

Pg. 10-11, Element 3, Sec. 1/Para 1

Purpose



Work Assignment



Work Assignment Close-Out



Work Assignment Amendment



Incremental Funding



Work Plan Approval

Period of Performance

From 09/07/2011 To 11/18/2012

Comments:

The purpose of this action is to initiate Work Assignment 1-34. The Contractor shall provide a cost estimate and work plan in accordance with the contract.



Superfund

Accounting and Appropriations Data



Non-Superfund

SFO
(Max 2)

Note: To report additional accounting and appropriations data use EPA Form 1900-89A

Line	CON (Max 5)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 8)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:

11/19/2009 To 11/18/2014

Cost/Fee:

LOE:

This Action:

Total:

Work Plan / Cost Estimate Approvals

Contractor WP Dated:

Cost/Fee:

LOE:

Cumulative Approved:

Cost/Fee:

LOE:

Work Assignment Manager Name Brilla Johnson

(Signature)

(Date)

Branch/Mail Code:

Phone Number 202-566-1465

FAX Number:

Project Officer Name Cathy Turner

(Signature)

(Date)

Branch/Mail Code:

Phone Number: 202-566-0951

FAX Number:

Other Agency Official Name

(Signature)

(Date)

Branch/Mail Code:

Phone Number:

FAX Number:

Contracting Official Name Jami Rodgers

(Signature)

(Date)

Branch/Mail Code:

Phone Number: 202-564-4781

FAX Number:

Work Assignment Statement of Work

Title: Evaluating the Effectiveness of VADEQ's Risk-Based Inspection Strategy

Contractor: IEc, Inc.

Contract No.: EP-W-10-002

Work Assignment Number: 1-34

Phase 1:

Estimated Period of Performance: Date of issuance to November 18, 2011

Estimated Level of Effort: 305 hours

Phase 2:

Estimated Period of Performance: November 19, 2011 to November 2012

Estimated Level of Effort: 555 hours

Key EPA Personnel:

Work Assignment COR (WA COR): Britta Johnson

OP-OSEM-ESD 1807T

202-566-1465

202-566-2211

Contract Level COR:

Cathy Turner

CMG/OP (1805T)

202/566-0951

202/566-3001 (fax)

BACKGROUND AND PURPOSE:

Located within the Office of Policy (OP)'s Office of Strategic Environmental Management is the Evaluation Support Division (ESD). ESD's mission is to build the capacity of EPA staff and managers to conduct program evaluation activities throughout the Agency by providing technical support and training on program evaluation for EPA's national programs and regional offices. A crucial component in assessing the benefit of meeting goals, objectives, and sub-objectives is having measurable results.

As part of its effort to encourage the effective use of program evaluations throughout the Agency, ESD promotes program evaluation through a Program Evaluation Competition (PEC or Competition). This Competition is part of an ongoing, long-term effort to help build the capacity of headquarters and regional offices to evaluate activities and to improve measures of program performance. This program evaluation project was chosen for support under the current Program Evaluation Competition sponsored by OP.

The Virginia Department of Environmental Quality (VADEQ) launched a three-year pilot in 2009 intended to assess alternative targeting methods for establishing annual inspection

strategies utilizing flexibilities contained in the existing compliance Monitoring Strategy (CMS) process. VADEQ's Air Compliance, Water Compliance, and Resource Conservation and Recovery Act (RCRA) Subtitle C and D programs are participating in the pilot. The pilot also looks at more focused inspection activity and reporting for well-performing facilities in lieu of full Compliance Evaluation Inspections (CEIs). It is hoped that successful demonstration may lead to consideration of additional future flexibilities for compliance activities conducted by VADEQ.

Historically, VADEQ has followed the traditional CMS approach to inspection planning which is based primarily on facility size and classification as the means of establishing inspection frequencies. This traditional approach can, in some instances, result in large facilities with excellent compliance histories being inspected frequently with considerable staff resources and questionable environmental value-added. Conversely, smaller facilities or those with poor compliance records may not be inspected at an appropriate frequency to address potential environmental concerns in a timely fashion.

In practice, VADEQ has routinely exceeded the number of inspections required under CMS by 10-30 percent depending on the media program. For this study, VADEQ met the baseline CMS requirements while applying the Risk-Based Inspection Strategy (RBIS) approach to those facilities inspected above and beyond the CMS minimum.

The protocol for RBIS is comprised of five elements (compliance history, environmental sensitivity, agency exposure/sectors, multi-media applicability, and environmental excellence program participation) designed to identify those facilities that pose the greatest potential for environmental impact and therefore represent the most effective use of limited compliance resources. These elements are informed to be assessed by the experience of regional time who have intimate knowledge of the facilities and personnel operating them. Compliance Managers in each of VADEQ's seven regional offices play critical roles in identifying appropriate facilities to be inspected under RBIS.

The pilot was implemented through the Performance Partnership Agreement (PPA) between VADEQ and EPA Region III. The PPA is jointly managed by Region III's Office of Policy Management's Planning and Analysis Branch (PAB) and VADEQ's Office of Administration. The evaluation itself will be a collaborative effort including ESD, PAB, Region III's Office of Enforcement, Compliance, and Environmental Justice (OECFJ), and VADEQ.

The primary purpose of this evaluation is to examine the effects of the alternative targeting methods for establishing annual inspection schedules utilizing flexibilities contained in the existing CMS process on resource utilization and inspection targeting.

Quality Assurance (QA) Requirements

Check ☐ Yes or ☒ NO, if the following statement is true or false. The Contractor shall submit a written Quality Assurance Project Plan for any project that is developing environmental measurements or a Quality Assurance Supplement to the Quality Management Plan for any project which generates environmental data using models with their technical proposal.

TASKS AND DELIVERABLES:

The work assignment (WA) Contracting Officer Representative (COR) will review all deliverables in draft form and provide revisions and/or comments to the contractor. The contractor shall prepare the final deliverables incorporating the WA COR's comments.

Contractor personnel shall at all times identify themselves as Contractor employees and shall not present themselves as EPA employees. Furthermore, they shall not represent the views of the U.S. Government, EPA, or its employees. In addition, the Contractor shall not engage in inherently governmental activities, including but not limited to actual determination of EPA policy and preparation of documents on EPA letterhead.

The Tasks in the work assignment will be completed in two phases. Phase I Tasks will be completed by November 18, 2011 and include Tasks 1 and 2. Phase II will be completed between November 19, 2011 and November 18, 2012 and will include all remaining Tasks.

TASK 1: PREPARE WORKPLAN

The contractor shall prepare a workplan that addresses Phase 1 and 2 within 15 calendar days of receipt of a work assignment signed by the Contracting Officer (CO). The workplan shall outline, describe and include the technical approach, resources, timeline and due dates for deliverables, a detailed cost estimate by task and a staffing plan. The WA COR and the Contract Level COR and the CO will review the workplan. However, only the CO can approve/disapprove the workplan. The contractor shall prepare a revised workplan incorporating the Contracting Officer's comments, if required.

Deliverables and Schedule Under Task 1

- | | |
|----------------------|---|
| 1a. Workplan | Within 15 calendar days of receipt of work assignment. |
| 1b. Revised workplan | Within 7 calendar days of receipt of comments from the CO, if required. |

NOTE REGARDING WORK ASSIGNMENT DELIVERABLES AND TECHNICAL DIRECTION:

The Work Assignment Contracting Officer's Representative (COR) is authorized to issue technical direction (TD) under this work assignment. The COR will follow-up all oral technical direction in writing within 5 days.

TASK 2: DOCUMENT REVIEW AND DESIGN METHODOLOGY

[Contract Scope of Work Element III, Section 1, para(s) 1, page(s) (10 -11)]

2-1 PARTICIPATE IN A CONFERENCE CALL. The contractor shall participate in a conference call with the WA COR and other Agency staff to clarify the purpose of the evaluation effort and to exchange ideas about the design of the assessment, the information to be collected,

potential sources of information, appropriate ways to analyze and present the information, and other pertinent matters. The COR will contact the contractor and provide a time and date for the conference call. For the purposes of costing the contractor shall assume two, 2-hour conference calls.

2-2 REVIEW DOCUMENTS. The WA COR will provide the contractor with relevant links and essential documents to become familiar with the history, goals, and status of each program activity to be evaluated. In addition, the contractor shall conduct a literature review to determine if any existing evaluations, studies or analyses of risk-based inspection strategies have been conducted. The contractor is expected to seek out other documents for review, including those from government and non-government sources, to become familiar with all aspects of the program that are relevant to this evaluation effort. The contractor shall complete a review of these documents seven (7) calendar days after receiving them.

The contractor shall also prepare and submit to the WA COR an annotated bibliography of the findings from the document and literature review. The contractor shall revise and update the bibliography periodically as additional literature sources are identified and reviewed.

2-3 SCOPING TASK. The contractor shall conduct a scoping exercise to better understand and identify the feasible data sources (qualitative and/or quantitative) and data collection methods (surveys, in-person interviews, site visits, data base review or literature review, internet search, review of progress reports etc.,) that are most appropriate for this evaluation. Based on conference calls (Task 2-1) and independent analysis, the contractor shall prepare a brief memo summarizing the results of this effort. The contractor shall deliver the scoping document 7 calendar days after receiving a TD from the WA COR.

2-4 ASSIST IN DEVELOPING A LOGIC MODEL. The development of a logic model is an essential tool in developing a common understanding of a program's inputs, outputs and activities. As an initial step in preparation for the evaluation, EPA and VADEQ began developing an outline of a logic model for the program. EPA will provide the outline to the contractor. Based on information gathered from the conference calls (Task 2-1) and document review (Task 2-2), the contractor will develop and submit a draft logic model using software (e.g., Microsoft Word, Power Point) that can be manipulated/revised by EPA within 7 calendar days after receipt of the draft logic model from the WA COR. The development of the logic model is an iterative process. The contractor shall finalize the logic model within 7 calendar days after receipt of comments on draft(s) of the logic model from the WA COR.

2-5 REFINE EVALUATION QUESTIONS. EPA is providing an initial list of draft evaluation questions for use by the contractor (see below). The EPA evaluation team has identified the following key questions to provide focus to the program evaluation. These questions, while subject to further refinement, will form the basis of the evaluation going forward. The overarching questions would likely remain consistent, but the specific questions and sub-questions would be subject to revision. Using this list, the information gathered in Tasks 2-1 and 2-2, and the logic model developed in Task 2-4, the contractor shall confer with the WA COR and evaluation team members to discuss and refine the evaluation questions that will be the subject of this evaluation. The contractor shall prepare and submit to the WA COR a

revised, comprehensive set of draft evaluations and sub-questions that will be the subject of this evaluation. The contractor shall finalize the draft questions 7 calendar days after receipt of comments from the WA COR via Technical Direction (TD). For the purposes of costing, the contractor shall assume two, 2-hour conference calls.

The EPA evaluation team has identified the following key questions to provide focus to the program evaluation and to maximize its usefulness and effectiveness.

Overarching Evaluation Questions

While subject to further refinement, these questions are the guiding questions for the evaluation.

1. Does the RBIS promote an efficient use of compliance resources?
2. Is the pilot targeting facilities that pose the greatest environmental risk?
 - a. Is non-compliance at targeted facilities?
 - b. Is there non-compliance at postponed facilities?
3. Are the criteria targeting the right facilities?
 - a. What are the key criteria to determine the likelihood of compliance?
 - b. Are the data entered and used appropriately?
4. In addition to the traditional metrics used for CMS reporting (deficiency letters, warning letters, notices of violation, enforcement actions taken, etc.), are there any other indicators that should be tracked to articulate program performance more accurately?

2-6 DESIGN EVALUATION METHODOLOGY. Based on the conference calls (2-1), the document review (Task 2-2), the scoping document (Task 2-3), the final logic model (Task 2-4), and the final evaluation questions (Task 2-5), the contractor shall prepare a draft evaluation methodology, which will address the purpose, audience, the refined questions that will be the focus of the evaluation, and information needed to evaluate the program. This methodology shall include an approach for identifying potential interviewees. The draft evaluation methodology shall also include a proposed schedule for each of the following: (1) all information gathering under Task 3-1, including interviews; (2) the compilation, analysis and presentation of information gathered (Task 3-2) and (3) providing a report outline and the draft and final reports (Task 4-1, 4-2 and 4-3). The draft evaluation methodology shall be due 30 calendar days after the receipt of a TD from the WA COR. The final evaluation methodology will be due 7 calendar days after receipt of comments from the WA COR via TD. For the purpose of costing, the contractor shall assume four, 2-hour conference calls.

2-7 EVALUATION ASSURANCE PLAN. The contractor shall prepare an evaluation assurance plan (EAP) that shall describe the use of primary and or secondary data sources for the evaluation report. Specifically, the EAP will describe: 1) the purpose of the evaluation, 2) the methodology used to collect data for the report, 3) how and where data for the evaluation was collected, 4) why the particular data collection method was chosen, 5) how the data will be used and by whom, 6) how the resulting evaluation report will be used and by whom and, 7) any data limitations or caveats. An example of an EAP will be provided by the COR. The contractor shall submit the EAP to the WA COR one week after the final evaluation methodology is approved. A final EAP will be delivered 3 calendar days after receipt of comments from the WA COR via TD.

Deliverables and Schedule Under Task 2

2-1	Participate in conference	To be specified by the WA COR
2-2	Summary of Document Review documents	7 calendar days after receipt of
2-3	Scoping Memo	7 calendar days after receipt of TD from WA COR
2-4	Finalize Logic Model	7 calendar days after receipt comments on the draft Logic Model from WA COR
2-5a	Draft Refined Questions	7 calendar days after conference call with WA COR
2-5b	Final Refined Questions	7 calendar days after receipt of comments from WA COR via TD
2-6a	Draft evaluation methodology	30 calendar days after receipt of TD from WA COR
2-6b	Final evaluation methodology	7 calendar days after receipt of comments via TD from WA COR
2-7a	Draft Evaluation Assurance Plan	7 calendar days after WA COR approves final evaluation methodology
2-7b	Final Evaluation Assurance Plan	3 calendar days after receipt of comments via TD from WA COR

Phase II includes Tasks Task 3 and 4.

TASK 3: INFORMATION GATHERING AND ANALYSIS

[Contract Scope of Work Element III, Section 1, para(s) 1, page(s) (10 -11)]

3-1 INFORMATION GATHERING. The information that is needed to conduct this evaluation will come from a variety of sources including the information identified in Task 2-3 and included in the final methodology 2-6b. Within 7 calendar days after the WA COR approves the evaluation methodology (via TD), the contractor shall begin the data collection process specified in the approved evaluation methodology. At this stage, EPA believes the contractor should focus on, but not be limited to, three primary sources of data for the evaluation: document and information review on the design and implementation of the RBIS pilot, existing performance data regarding the number and types of inspections (the majority of these data are housed in VADEQ databases; the evaluation team will run queries and provide the contractor with the relevant data), and a literature review of risk-based enforcement. The data collection will end in accordance with the schedule included in the evaluation methodology.

3-2 DISCUSSION OF DATA COMPILATION, ANALYSIS, AND PRESENTATION. In accordance with the evaluation methodology schedule, the contractor shall meet via conference call with the WA COR and other Agency staff to present and discuss approaches to and preliminary results of data compilation, analysis, and presentation of the information. Prior to this call and for discussion during the call, the contractor shall provide the WA COR with a brief

memo that outlines preliminary findings for each evaluation question, overall preliminary recommendations/conclusions.

Deliverables and Schedule Under Task 3

3-2a	Discuss data compilation, analysis and presentation	In accordance with Methodology Schedule approved in Task 2-5b
3-2b	Briefing memo of preliminary findings	In accordance with Methodology Schedule approved in Task 2-5b

TASK 4: REPORTS

[Contract Scope of Work Element III, Section 1, para(s) 1, page(s) (10 -11)]

4-1 REPORT OUTLINE. The contractor shall submit an annotated outline describing the contents of the draft and final report. This will serve as a roadmap for laying out the format of the report. This will be instrumental in organizing the format and flow of the document and outlining the “story” that the evaluation report will tell.

4-2 DRAFT REPORT. In accordance with the evaluation methodology schedule, the contractor shall submit a draft report containing, the compilation, analysis, and presentation of information developed and gathered during the conduct of the evaluation. Specifically, the contractor shall include information obtained or developed in support of Tasks 2-1 through 3-2. For purposes of costing, the contractor shall assume that a sequence of a draft preliminary findings memorandum and two separate drafts of the report will be required.

4-3 FINAL REPORT. The contractor shall provide a final report that reflects appropriate consideration of the Agency’s comments on the draft report and of any comments received during the oral presentations. The WA COR will provide the contractor with a copy of the ESD’s Report Style Guidelines. These guidelines shall be used to write all components of the evaluation report. In addition, the contractor shall use the ESD Report Cover provided by the WA COR when preparing the final report.

4-4 ORAL PRESENTATIONS. The contractor shall be prepared to make at least one oral presentation of the information at a date, time, and location to be specified by the WA COR in a TD. The location will most likely be Philadelphia, PA. Additional presentations may also occur in Washington, DC and/or Richmond, VA. The contractor shall prepare appropriate briefing materials, specifically, a power point briefing for the oral presentation.

4-5 FACTSHEET. The contractor shall develop a fact sheet summarizing the evaluation purpose, questions, methodology, results and recommendations. The WA COR will provide the contractor with a copy of a fact sheet template 7 calendar days after completion of the Final Report.

4-6 EVALUATION RECOMMENDATION TAXONOMY FORM. The EPA will use this form to categorize each recommendation the contractor develops for the final report. The

contractor shall complete the Evaluation Recommendation Taxonomy Form by providing each recommendation for the given evaluation, its proposed evaluation recommendation category, its direct environmental impact, and any additional comments the contractor may have. The list of the evaluation recommendation categories is located on the form for reference purposes. The form will in no way influence the contents of the report or briefings. The WA COR will provide the contractor with a copy of the Evaluation Recommendation Taxonomy Form. The contractor shall complete the taxonomy form 7 calendar days after the final report is completed.

Deliverables and Schedule Under Task 4

4-1	Report Outline	In accordance with the evaluation methodology schedule approved by the COR in task 2-5b.
4-2	Draft report	In accordance with the evaluation methodology schedule approved by the COR in task 2-5b.
4-3	Final report	14 calendar days after receipt of comments on the draft report and oral presentations.
4-4	Oral presentation	To be scheduled by the WA COR
4-5	Fact Sheet	7 calendar days after completion of Final Report
4-6	Evaluation Recommendation Taxonomy	7 calendar days after the final report is completed.

Table 1: Summary of Deliverables and Dates

Task	Deliverable	Due Date
Task 1 Prepare Work plan		
1a	Work plan	Within 15 calendar days of receipt of work assignment
1b	Revised work plan	Within 7 calendar days of receipt of comments from CO
Task 2 Document Review and Design Methodology		
2-1	Participate in conference calls	To be specified by the WA COR
2-2	Review of Documents/ Bibliography, summary of findings	7 calendar days after receipt of documents
2-3	Scoping Memo	7 calendar days after receipt of TD
2-4	Finalize Logic Model	7 calendar days after receipt of draft Logic Model from WA COR
2-5a	Draft Refined Questions	7 calendar days after receipt of TD from WA COR
2-5b	Final Refined Questions	7 calendar days after receipt of comments from WA COR via TD
2-6a	Draft Methodology	30 calendar days after receipt of TD from WA COR
2-6b	Final Methodology	7 calendar days after receipt of comments from WA COR
2-7a	Draft Evaluation Assurance Plan	7 calendar days after WA COR approves final evaluation methodology
2-7b	Final Evaluation Assurance Plan	3 days after receipt of comments from WA COR via TD
Task 3 Information Gathering and Analysis		
3-2	Discussion of Data Compilation, Analysis and Presentation Plan	In accordance with Methodology Schedule approved in Task 2-5b
Task 4 Report		
4-1	Report Outline	In accordance with Methodology Schedule approved in Task 2-5b
4-2	Draft Report	In accordance with Methodology Schedule approved in Task 2-5b
4-3	Final Report	14 calendar days after receipt of comments on Draft Report from WA COR
4-4	Oral Presentations	To be scheduled by the WA COR
4-5	Fact Sheet	7 calendar days after completion of Final Report
4-6	Evaluation Recommendation Taxonomy Form	3 calendar days after completion of the Final Report

